

CLAIMS

1. A gene coding for a protein having activity that transfers a glycoside to the 5 position of a flavonoid.

5 2. A gene as set forth in claim 1 that codes for a protein having an amino acid sequence described in any one of SEQ ID NOs: 7 through 10 or 12 and having activity that transfers a glycoside to the 5 position of a flavonoid, or a protein having an amino acid sequence modified by addition and/or deletion of one or more amino acids and/or
10 substitutions by one or more other amino acids relative to said amino acids and maintains activity that transfers a glycoside to the 5 position of a flavonoid.

15 3. A gene as set forth in claim 1 that codes for a protein having an amino acid sequence that has homology of 30% or more with an amino acid sequence described in any one of SEQ ID NOs: 7 through 10 or 12, and has activity that transfers a glycoside to the 5 position of a flavonoid.

20 4. A gene as set forth in claim 1 that codes for a protein having an amino acid sequence that has homology of 50% or more with an amino acid sequence described in any one of SEQ ID NOs: 7 through 10 or 12, and has activity that transfers a glycoside to the 5 position of a flavonoid.

25 5. A gene as set forth in claim 1 that codes for a protein, wherein said gene can be hybridized under conditions of 5 x SCC and 50°C with all or a portion of a nucleotide sequence that codes for an amino acid sequence described in any one of SEQ ID NOs: 7 through 10 or 12,
30 and has activity that transfers a glycoside to the 5 position of a flavonoid.

6. A vector containing a gene as set forth in ~~any one of claims 1 through 5~~ *claim 1*

35 7. A host transformed with a vector as set forth in claim 6.

8. A protein encoded by a gene as set forth in ~~any one of claims 1 through 5~~ *claim 1*

9. A process for producing a protein comprising culturing or breeding a host as set forth in claim 7, and recovering a protein having activity that transfers a glycoside to the 5 position of a flavonoid from said host.

5 10. A plant into which is introduced a gene as set forth in ~~any one of claims 1 through 5~~^{claim}, or its progeny or tissue having identical properties.

11. A cut flower of the plant as set forth in claim 10 or its progeny having identical properties.

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